



---

# ***New Directions NASA's Airspace Operations and Safety Program***

Leighton Quon

# Three mega-drivers have emerged that are shaping the future of aviation



Traditional measures of global demand for mobility—economic development, urbanization—are growing rapidly



Severe energy and climate issues create enormous affordability and sustainability challenges



Revolutions in automation, information and communication technologies enable opportunity for safety critical autonomous systems



# NASA Aeronautics Research Six Strategic Thrusts



## Safe, Efficient Growth in Global Operations

- Enable full NextGen and develop technologies to substantially reduce aircraft safety risks



## Innovation in Commercial Supersonic Aircraft

- Achieve a low-boom standard



## Ultra-Efficient Commercial Vehicles

- Pioneer technologies for big leaps in efficiency and environmental performance



## Transition to Low-Carbon Propulsion

- Characterize drop-in alternative fuels and pioneer low-carbon propulsion technology



## Real-Time System-Wide Safety Assurance

- Develop an integrated prototype of a real-time safety monitoring and assurance system



## Assured Autonomy for Aviation Transformation

- Develop high impact aviation autonomy applications

# What is the Airspace Operations and Safety Program?

This program integrates the Airspace Systems Program and Aviation System-Safety work.

